



United States Environmental Protection Agency

MISSION

The National Homeland Security Research Center (NHSRC) develops and delivers reliable, responsive expertise and products based on scientific research and evaluations of technology. Our expertise and products are widely used to prevent, prepare for, and recover from public health and environmental emergencies arising from terrorist threats and incidents.

ADVANCING OUR NATION'S SECURITY THROUGH SCIENCE

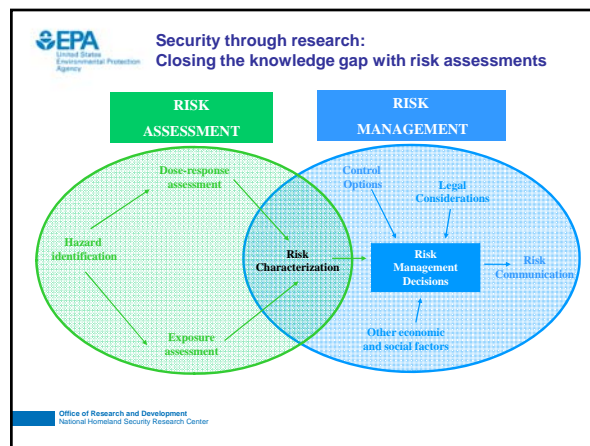
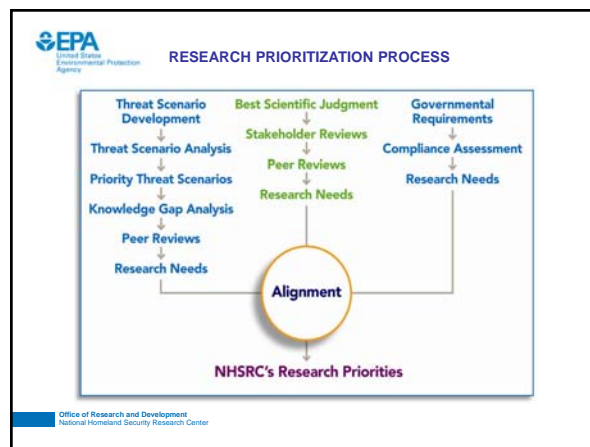
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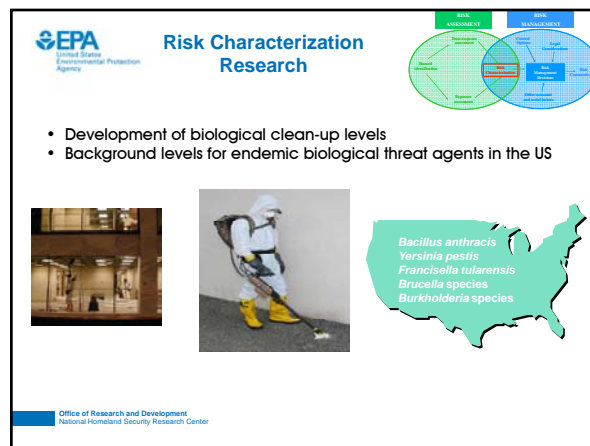
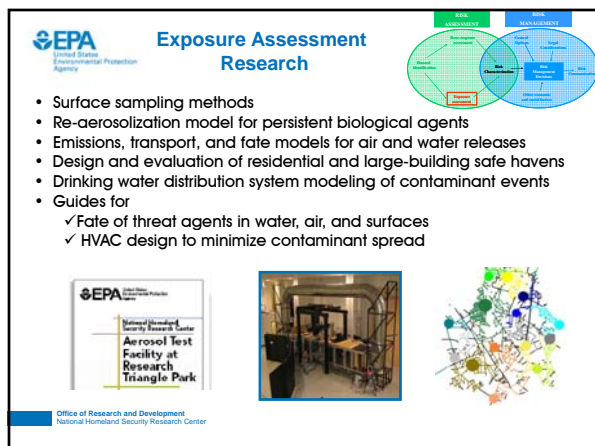
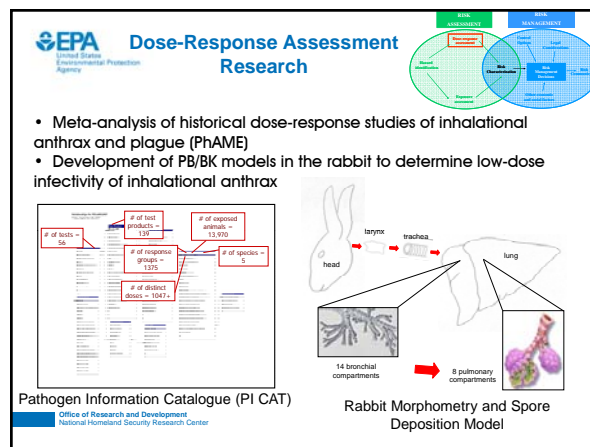
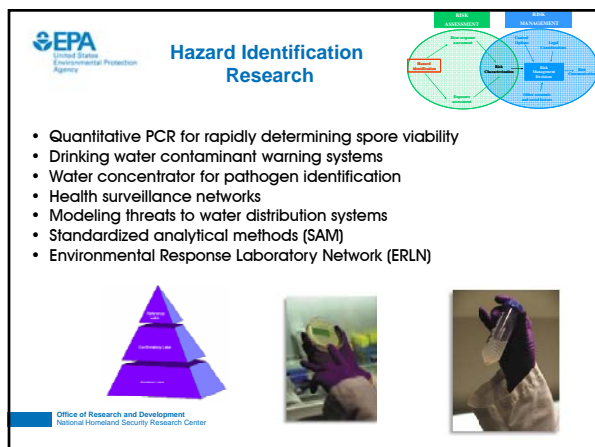
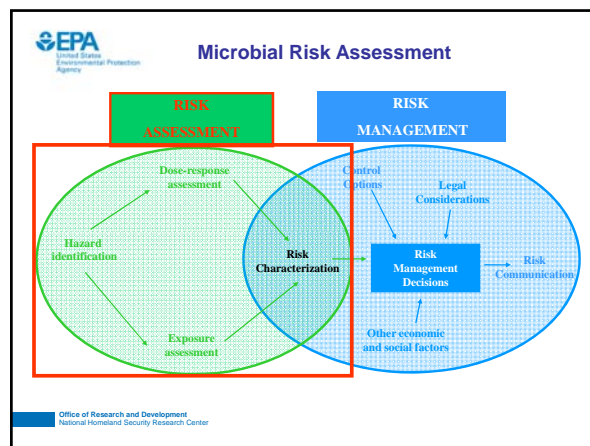
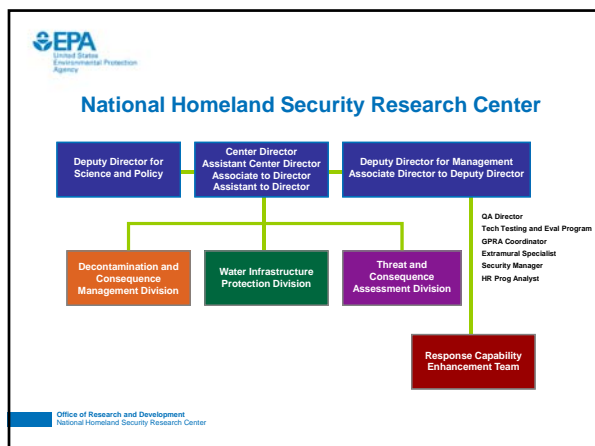
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AUTHORITY

- Bioterrorism Act of 2002
- Homeland Security Presidential Directives 7, 9, and 10:
 - Critical water infrastructure safety and security
 - Surveillance program for chemical, biological, and radiological terrorism threats to public health and the environment
 - Lead role in decontamination efforts in the event of an emergency


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Microbial Risk Assessment Tools



- Compendium of Microbial Risk Assessment Methods
- Support for Environmental Rapid Risk Assessment (SERRA) Database
- Incident-based Microbial Risk Assessment Framework



Tier I: Site/Incident Assessment

Tier II

- Hazard Assessment**
 - Hazard Characterization
 - Dose Response
 - Data Sources: Laboratory studies, Published Literature, Databases
- Exposure Assessment**
 - (EA-1) Characterize Release
 - (EA-2) Develop and Execute Sampling
 - (EA-3) Define Contaminated Area
 - (EA-4) Identify Exposure Pathways
 - (EA-5) Define Exposed Population
 - (EA-6) Estimate/Predict Exposure Concentrations
 - (EA-7) Estimate Exposure Doses
 - Data sources: Surveys, Published Exposure Models

Tier III: Risk Characterization

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Specialized Research Facilities








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Customers

- EPA's Office of Solid Waste and Emergency Response (OSWER)
- EPA's Office of Water (OW)

Collaborators

- Department of Homeland Security (DHS) (NBACC, CSAC)
- Centers for Disease Control and Prevention (CDC) (NIOSH)
- National Counterterrorism Center (DNI-NCTC)
- Department of Defense (DOD) (ECBC, CHPPM, USAMRIID, NSWC, DTRA)
- Department of Energy (DOE) (Argonne, Sandia, Oak Ridge, Idaho, Livermore)
- U. S. Geological Survey (USGS)
- Food and Drug Administration
- Department of Transportation
- Department of Commerce (NIST)
- Central Intelligence Agency
- Federal Bureau of Investigation
- Public and Private Water Utilities
- Cities of Cincinnati, Milwaukee, Pittsburgh

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